

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) An ink jet printhead comprising:
a plurality of nozzles;
a bubble forming chamber corresponding to each of the nozzles respectively;
a plurality of heater elements disposed in each of the bubble forming chambers respectively, each heater element configured for thermal contact with a bubble forming liquid; such that,
heating each heater element to a temperature above the boiling point of the bubble forming liquid forms a gas bubble that causes the ejection of a drop of an ejectable liquid through the associated nozzle; wherein,
each heater element is an elongate strip suspended between corresponding electrodes on opposite sides of the bubble forming chamber, each strip having a cross section with a lateral dimension at least triple that of the thickness of that strip and different than a lateral dimension of each other strip, the thickness of each strip being less than 0.3 microns, and
the heater elements and associated electrodes are arranged so that the electrodes are non-coincident with the electrodes of the other heater elements.
2. (Previously Presented) The printhead of claim 1 wherein the gas bubble is formed on an axis which extends through the center of the nozzle.
3. (Previously Presented) The printhead of claim 1 wherein the bubble forming chamber has a circular cross section.
4. (Cancelled)
5. (Original) The printhead of claim 1 wherein the bubble forming liquid and the ejectable liquid are of a common body of liquid.
6. (Original) The printhead of claim 1 being configured to print on a page and to be a page-width printhead.

7. (Cancelled)

8. (Original) The printhead of claim 1 wherein each heater element is configured such that an actuation energy of less than 500 nanojoules (nJ) is required to be applied to that heater element to heat that heater element sufficiently to form a said bubble in the bubble forming liquid thereby to cause the ejection of a said drop.

9. (Original) The printhead of claim 1 configured to receive a supply of the ejectable liquid at an ambient temperature, wherein each heater element is configured such that the energy required to be applied thereto to heat said part to cause the ejection of a said drop is less than the energy required to heat a volume of said ejectable liquid equal to the volume of the said drop, from a temperature equal to said ambient temperature to said boiling point.

10. (Original) The printhead of claim 1 comprising a substrate having a substrate surface, wherein the areal density of the nozzles relative to the substrate surface exceeds 10,000 nozzles per square cm of substrate surface.

11. (Original) The printhead of claim 1 wherein each heater element has two opposite sides and is configured such that a said gas bubble formed by that heater element is formed at both of said sides of that heater element.

12. (Previously Presented) The printhead of claim 1 wherein the bubble which each heater element is configured to form is collapsible and has a point of collapse, and wherein each heater element is configured such that the point of collapse of a bubble formed thereby is spaced from that heater element.

13. (Original) The printhead of claim 1 comprising a structure that is formed by chemical vapor deposition (CVD), the nozzles being incorporated on the structure.

14. (Original) The printhead of claim 1 comprising a structure which is less than 10 microns thick, the nozzles being incorporated on the structure.

15. (Previously Presented) The printhead of claim 1 comprising a plurality of nozzle chambers each corresponding to a respective nozzle, the heater elements within each chamber being formed on different respective layers to one another.
16. (Original) The printhead of claim 1 wherein each heater element is formed of solid material more than 90% of which, by atomic proportion, is constituted by at least one periodic element having an atomic number below 50.
17. (Original) The printhead of claim 1 wherein each heater element includes solid material and is configured for a mass of less than 10 nanograms of the solid material of that heater element to be heated to a temperature above said boiling point thereby to heat said part of the bubble forming liquid to a temperature above said boiling point to cause the ejection of a said drop.
18. (Previously Presented) The printhead of claim 1 wherein each heater element is covered by a conformal protective coating, the coating of each heater element having been applied substantially to all sides of the heater element simultaneously such that the coating is seamless.
- 19-54. (Cancelled)